

REMARKS

Please consider the following remarks made in response to the Office Action dated January 19, 1993.

Amendments to the Specification

The specification is amended to correct typographical errors, break up the description of certain of the drawings, and to add a new Fig. 11, and a description for that figure.

The error noted by the Examiner at the top of page 112 has been corrected, by removal of the second occurrence of the designation 18:1. The inclusion of the second 18:1 was an obvious mistake, as the levels for this fatty acid obviously could not both go up and go down as a response to the expression of the antisense desaturase.

The submission of Fig. 11 is in accordance with 35 U.S.C. 113. (See 37 CFR 1.81; MPEP 608.02(a)). As described in greater detail below, the information found in Fig. 11 is derived strictly from the description found in the specification as filed, and as such does not introduce new matter to the application. While this drawing is not necessary for the understanding of the subject matter to be patented, it may facilitate an understanding of one of the specific embodiments.

Pending Claims

Claims 18-26, 33-36 and 38-41 remain pending in the present application.

Additional Claims

New Claims 68-82 are submitted for consideration. These claims are directed to specific embodiments of the invention utilizing plant stearoyl-ACP desaturases.

Support for these claims is found throughout the specification and particularly in Examples 9, 12 and 13.

Restriction and Election of Species Requirement

Applicants confirm the election of Group II, species (c) and subspecies (c)(2). As such, Claims 18, 21-22, 26, 33, 35-36 and 41 are in consideration in the instant application, as well as newly submitted Claims 68-82. Claim 37 has been canceled.

Claims 19-20, 23-25, 34 and 38-40 have been withdrawn from consideration as drawn to non-elected species and subspecies of Group II. Upon indication of allowable subject matter in a generic claim of Group II, Applicants request that the withdrawn claims be considered by the Examiner. (MPEP 806.04(d)).

The Patent Office has withdrawn Groups I and III-VIII, comprising the subject matter of Claims 1-17, 27-32 and 42-67, from consideration as drawn to non-elected inventions. These claims are hereby canceled.

Information Disclosure Statement

Applicants submit herewith a Supplemental Information Disclosure Statement, reciting related applications, and particularly citing references cited in those related applications. These references were not previously listed separately on an IDS for this application. The format of the IDS has been corrected to delete the phrase "references cited therein" from the RELATED APPLICATIONS section.

Applicants note that this IDS is being filed before the mailing of a final action and the Commissioner is hereby authorized to charge Deposit Account No. 03-0173 the \$200.00 fee as required in 37 C.F.R. § 1.97(c).

New Oath

A substitute declaration is enclosed. Changes made in this new declaration obviate the objections made by the Examiner.

Benefit of Priority Dates

The question of whether Applicant's invention, as recited in a particular claim or group of claims, benefits from a given filing date is not germane to the prosecution of this application in the absence of a particular rejection or objection of record. In the absence of any relevant rejection or objection to which the benefit of a particular subject matter is at issue, Applicants are not able to

evaluate the accuracy or precision of the Examiner's comments.

Objections to the Specification and Rejection of the Claims

Please consider the following remarks in regard to the made to objections to the specification and specific rejections made in the Office Action.

35 U.S.C. § 112, Second Paragraph

Claims 18, 21-22, 26, 33, 35-36 and 41 stand rejected by the Patent Office as being indefinite.

Subject Matter of the Invention

Claims 18 and 33 are rejected for including parentheses. The above amendments to the claims address the concerns noted by the Examiner and obviate this rejection.

Claims 18 and 33 are further rejected under this provision for failing to point out the subject matter which Applicants regard as the invention. Particularly, the Examiner states that modification of fatty acid compositions or triglycerides is specifically through the inhibition of endogenous plant desaturase. Applicants respectfully traverse this rejection and request reconsideration.

Applicants invention, as described in the specification and as reflected in the claims under consideration, involves the use of a recombinant DNA construct which is integrated into the genome of a plant host cell. This construct encodes

a fatty acid modifying plant desaturase sequence under the control of regulatory elements functional in the plant cell. Contrary to the implication in the Office Action, antisense inhibition is but one approach which can be taken using Applicants' method.

When sense desaturase encoding DNA is used, the modification of plant fatty acid composition in the cell is most typically by the enhancement, not inhibition, of desaturase activity. Example 9, found on pages 77-86, demonstrates this approach. On page 86 the expression of exogenous desaturase from a sense construct is shown, with a decrease in the saturated fatty acid content observed over controls.

Additionally, it sometimes happens that a sense oriented DNA will have the effect of decreasing the activity of the encoded enzyme, almost as if it was an antisense construct. When this occurs the phenomenon is referred to as transswitch. For this reason, it is possible that Applicants constructs could be used to increase saturated fatty acid levels, even when a sense oriented construct is utilized.

Applicants have clearly enabled both sense and antisense constructs, and for this reason respectfully request that the Examiner withdraw the §112, first paragraph rejection to Claims 18 and 33.

Duplication

The claims are also rejected under §112, first paragraph, for duplication, notably that Claims 18, 21-22, and 26 duplicate Claims 33, 36-37 and 41. Claims 22 and 37 are rejected under this paragraph for failing to further limit the invention. Applicants respectfully traverse these rejections and request reconsideration.

Claim 18 recites a method for modifying the fatty acid composition of a plant host cell. Claim 33 recites a method for modifying the fatty acid components of oil triglycerides of a host cell. Claim 22 recites that the saturated fatty acids of Claim 18 are triglyceride acyl fatty acid groups. Claim 37 has been canceled.

In the restriction requirement mailed on October 9, 1992, the Patent Office took the position that Claims 22 and 33-41, claims directed to the modification of triglyceride acyl fatty acids, comprised a patentably distinct species with respect to the generic Claims 18, 21 and 26 of Group II. This action was understood to be correct by Applicants, for the difference between the modification of the composition of acyl-ACP fatty acid pools as compared with the ability to influence a modification of the acyl-ACP fatty acids incorporated into the oil triglycerides of a plant cell. As such, the instant rejection of the claims for duplication is not accurate from a factual standpoint, nor is it consistent with the previous status position taken by the office. For

these reasons, withdrawal of this rejection is respectfully requested.

Claims 21 and 36 are rejected under §112, first paragraph as confusing. Claims 21 and 36 have been amended to recite seed cells, which amendment obviates this rejection.

In view of the above, Applicants respectfully request that all 35 U.S.C. § 112, second paragraph rejections of the claims be withdrawn.

35 U.S.C. § 112, First and Second Paragraphs

Claims 18, 21-22, 26, 33, 35-36 and 41 are rejected under the above paragraphs for non-enablement and for failure to particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

Applicants respectfully traverse these objections, and request reconsideration.

"Modifying Portion of"

The language "modifying portion of" (which appears in Claims 18 and 33) is noted by the Examiner as being unclear.

A plant desaturase is an enzyme, and, like all enzymes, it is defined by its activity. In the case of the desaturase enzyme, this constitutes the ability to affect a modification in the saturation level of a fatty acid. The term "fatty acid modifying plant desaturase" therefore describes both full and partial sequences, as long as they include the

ability to modify the host cell's fatty acid composition. The language is not confusing, although it may be redundant in light of the plain meaning of "plant desaturase" enzyme.

In any case, in an effort to advance the prosecution of the instantly claimed invention, the language "modifying portion of" has been removed from the amended claims.

Content of the Constructs

Applicants note the Examiner's characterization of pCGN3234 as "clearly not the preferred best mode".

Applicant's have disclosed and claimed various methods for modifying plant fatty acid compositions in manners consistent with the invention as a whole. The best mode of practicing Applicant's invention is discoverable only in reference to the specification as a whole with respect to a particular claim. Particular experiments showing plasmid constructs, such as pCGN3242 and pCGN3234, are included in the specification to illustrate the invention, and may, or may not, represent Applicants' best mode with respect to a given claim.

The Examiner also rejected the claims for the reason that constructs pCGN3242 and pCGN3234 are unclear.

Applicants first of all note, as stated above, that these particular constructs are exemplary and are not necessary to practice the invention as claimed.

As to the construction of pCGN3242, as suggested by the Examiner, the steps leading to the creation of pCGN3242 is

provided in newly submitted Fig. 11. This figure is derived from information in the specification, as follows:

On pages 49-50, Applicants describe, in Example 5, the construction of pCGN1703 from a commercially available plasmid, Bluescribe M13. All restriction sites and their locations in pCGN1703 are enabled by this description.

An enablement of the complete nucleotide sequence to the full length desaturase cDNA of pCGN3235, is provided in Figure C., and also in SEQ ID NO: 19.

The binary cassette pCGN1977 which includes an ACP expression construct, is described fully in Example 7, at pages 59-60.

The construction of the napin cassette pCGN3223 is described in Example 9, at pages 79-82.

The assembly of pCGN3242 from the above is fully described at pages 104 to 107.

Just as for pCGN3242, the starting materials and all the steps leading to pCGN3234 are described in detail in the specification, particularly in Example 13, at pages 107 to 109, and as described below.

The origin and length of the desaturase cDNA used in pCGN3234 is clearly enabled in the description found at page 110, where the "1.6 kb *Xba*I fragment from pCGN3235 containing the desaturase cDNA" is inserted into binary vector.

The sequence of the desaturase cDNA of pCGN3235 is given in Figure 4.C., and the original cloning vector, namely, pCGN1703, is completely described on page 49. The method used to clone desaturase cDNA into pCGN1703 to produce pCGN3235 is described in detail on pages 98-100.

Thus, the specification fully discloses the cloning vector, binary vector and the sequence of the cDNA from *B. campestris*. One ordinarily skilled in the art would require nothing more than this to make or reproduce pCGN3234.

Elements Necessary to Achieve Result

Claims 18, 21-22, 26, 33, 35-36 and 41 are also rejected under § 112, first and second paragraphs as incomplete for failing to recite elements necessary to achieve the stated end result, such as some type of antisense orientation for the desaturase cDNA. Applicants respectfully traverse this rejection and request reconsideration.

The Examiner further noted that, based on the disclosure as filed, it is not clear "what portions must be in the antisense orientation", or "what other elements must be included". As discussed above, Applicants' invention does not require an antisense orientation to achieve the end result of modifying the fatty acid composition of a plant host cell. Applicants' further submit that one ordinarily skilled in the art can easily use the disclosure as filed to practice the invention, and that all necessary elements have been claimed.

Applicants' method involves growing a plant host cell with a recombinant DNA construct. The claimed construct includes a fatty acid modifying plant desaturase under the control of regulatory elements functional in the plant cell under conditions which will promote the activity of these regulatory elements. One ordinarily skilled in the art would have no difficulty in verifying whether a particular desaturase encoding sequence is capable of modifying activity, or in choosing appropriate regulatory elements.

Insofar as this rejection implies that additional elements not recited are required for the claimed process, this rejection is not understood. It is submitted that the claims properly define the metes and bounds of this invention. Applicants are at a loss to further amend the claims in the absence of specific points by the Examiner.

35 U.S.C. § 112, First Paragraph

The Patent Office has objected to the specification as not enabling the practice of the claimed invention.

Modification of Fatty Acid Composition

The Examiner noted that there is variability in the oil compositions of cells produced from transgenics, and states that the only actual modification is in the level of stearate.

Applicants note initially that they have not claimed a method for modifying the fatty acid composition of a plant

host cell from one given weight percentage to another given weight percentage. Applicants have claimed a method for modifying the fatty acid composition of a plant host cell from a given weight percentage to a different weight percentage.

Furthermore, as explained on pages 23, middle paragraph, page 18, last paragraph, and the paragraph spanning pages 36-37, the variability in levels among transformants is desirable.

Specifically, and as noted on page 23, variability in expression is expected among transformants, even transformants of a single transformation experiment. As seen in the discussion on pages 18 and 36-37, transformed lines having different modified fatty acid compositions are easily incorporated into breeding programs. Variability in the range of fatty acid compositions among the transformants of a given experiment is hardly unpredictable, then, but a predictable and a desirable feature of the transformation process. The "variable range" of transformants noted by the Examiner represents, in essence, the development of useful "varieties" of transformant plants.

The specification provides ample evidence of the modifications to fatty acid or triglyceride content made possible by this invention, in stearate levels as well as in the levels of other fatty acids.

Applicants note that as the fatty acid levels in the specification are provided as weight percentages of total

fatty acids, one ordinarily skilled in the art will understand that in modifying the weight percentage level of one fatty acid, for instance stearate, it is a given that the composition of at least one other fatty acid will necessarily be modified as a weight percentage of the total.

On pages 110-113 the results of measurements made on the total fatty acid compositions of selected mature seeds are given. On page 86, the results of measurements of fatty acid contents are shown for plants resulting from an experiment wherein a single napin promoter construct was used in transformation, the construct including a single copy of a sense-oriented desaturase cDNA. For each example, changes in at least two fatty acid levels are disclosed.

For these reasons, Applicants respectfully request that the objection for failure to enable the claimed method for modifying oil be withdrawn.

Requirement of a Deposit

Applicants respectfully traverse the requirement for a deposit made in the Office Action, and request reconsideration.

As discussed fully above with regard to the content of the constructs, even were these particular constructs necessary to practice the invention, and they are not, such a deposit is unnecessary, given the detailed and complete disclosure contained in the specification as to how to produce these constructs.

In view of the above, Applicants submit that the all necessary elements have been disclosed in the Application as filed, such as to enable one ordinarily skilled in the art to practice the invention, and respectfully request that the 35 U.S.C. § 112, first paragraph objections to the specification be withdrawn.

35 U.S.C. § 112, First Paragraph

Claims 18, 21-22, 26, 33, 35-36 and 41 are rejected under this provision for the reasons set forth by the Examiner in the objections made to the specification. For the reasons given above in regard to the objections to the specification, Applicants submit that the claims are fully enabled, and withdrawal of this rejection is respectfully requested.

Enabling only for the transformation of *Brassica*

Claims 18, 21-22, 26, 33, 35-36 and 41 are also rejected under 35 U.S.C. § 112, first paragraph for the reason that the disclosure is enabling only for the transformation of *Brassica* with antisense oriented stearoyl-ACP from *Brassica*. Applicants respectfully traverse this rejection, and request favorable reconsideration. Newly submitted Claims 69, 70 and 73 each contain the limitation that the plant host cell is a *Brassica* cell.

Until Applicants' invention, however, no one had shown that such a modification of fatty acids with introduced

desaturase encoding sequences was possible with plants, *Brassica* or otherwise. Applicants' invention can be easily adapted and applied to other hosts, such as those recited in Claims 26 and 41. Given the present disclosure, one ordinarily skilled in the art can use known techniques to adapt the present method for use with such plants.

Transformation and screening methods adapted for other hosts are known and well within the ability of one ordinarily skilled in the art.

Thus, while Applicants' present invention, as discoverable in their desaturase cDNA and constructs, will enable one ordinarily skilled in the art to modify fatty acid compositions in host plant cells, it is also part of their invention that such a modification is possible at all. For this reason, modifications in many crops, other than *Brassica*, are enabled, as much by Applicants' success as by their detailed description, and Applicants' are entitled to claim their Application with similar breadth.

Enabling only for Transformation using Antisense

Orientation

Example 9 is a description of a sense transformation experiment, as discussed above. Hence, it is not necessary that the instant invention be limited to antisense-oriented sequences and inhibition of endogenous desaturases.

Furthermore, as discussed above, in transswitch transformations the sense oriented constructs will also

result in the inhibition of desaturase activity, with a net increase in saturated fatty acids.

Enabling only for Transformation with DNA from *Brassica*

Claims 69, 70, 73, 77, 78 and 82 recite a method of modifying the fatty acid composition of a plant host cell using a construct encoding DNA from *Brassica*.

Example 9 discloses modification using safflower stearoyl-ACP encoding sequences in *Brassica*. In fact, Applicants supply four such desaturase encoding sequences, in Figs. 2, 3 and 5. As Applicants' have disclosed modification of fatty acid and oil triglycerides using non-*Brassica* DNA, they are not limited to claiming *Brassica* DNA.

Enabling only for Transformation with Stearoyl-ACP

Desaturase

Claims 68 through 82 recite a method of modifying the fatty acid composition of a plant host cell which specifically recite a construct encoding a plant stearoyl-ACP desaturase.

As to the remaining claims, desaturases other than stearoyl-ACP desaturases are known, such as those disclosed on page 4, and these can similarly be used to produce constructs to broadly practice Applicants' modification method. Prior to Applicants' present application, nothing in the prior art demonstrated that the claimed method of

modification for plant cell fatty acid compositions could be successfully accomplished. The disclosure of the instant application represents the first demonstration of successful modification of plant saturated fatty acid compositions using a recombinant construct, i.e., that the level of saturates in a plant may be modified and that the fatty acid biosynthesis pathway in plants is amenable to such manipulation.

It is reasonable to extrapolate from these results that alternative desaturases may be used successfully in the modification of fatty acid levels. While plant fatty acid enzymatic pathways are complicated, desaturase enzymes are not known to be a rate-limiting or particularly critical reaction of these pathways. Applicants are the first, then, to demonstrate, as a principal, that if an exogenous fatty acid biosynthesis enzyme is introduced, or an endogenous enzyme inhibited by expression of a fatty acid enzyme from a recombinant construct, that a modification of total saturated fatty acid levels will result.

In any event, Applicants have submitted new Claims 75 and 82 which incorporate the limitations suggested by the Examiner in this rejection.

In view of the above, Applicants submit that they are entitled to methods as claimed using plant desaturase encoding constructs to modify cell fatty acid compositions, and respectfully request that the 35 U.S.C. § 112, first paragraph rejection to the claims be withdrawn.

35 U.S.C. § 103

Claims 18, 21-22, 26, 33, 35-37 and 41 are rejected as unpatentable over Kridl *et al.* taken with Knauf and Shewmaker *et al.*, and further in view of McKeon *et al.* and Weissman *et al.* This rejection is respectfully traversed as follows.

Weissman et al.

The Federal Circuit has recently reviewed the Weissman *et al.* reference cited against this application. See, In re Bell, 26 USPQ2d 1529 (Fed. Cir., 1993) (copy enclosed). The facts of *In re Bell* involved a an application filed in 1984 claiming a DNA sequence, and the rejection by the PTO combining the Weissman *et al.* reference and another reference showing an amino acid sequence for the protein of the DNA. The Federal Circuit described the problem of that case as whether "the amino acid sequence of a protein in conjunction with a reference indicating a general method for cloning renders the gene *prima facie* obvious." *In re Bell* at 1531. The PTO had argued that "in view of Weissman, a gene is rendered obvious once the amino acid sequence of its translated protein is known." *Id.* at 1532.

The Federal Circuit stated that to reject an invention based on Weissman *et al.* and a primary reference showing the amino acid sequence "amounts to a rejection based on the sequence of the primary reference alone. *Id.* at 1531. The Federal Circuit held that the claimed nucleic acid sequence

would not have been obvious, because an amino acid sequence is only a suggestion of the vast number of possible DNA sequences which could encode for that amino acid sequence.

Id. The Federal Circuit specifically refused to afford so broad a scope to Weissman, which does not suggest "that its teachings should be combined with those of [the primary reference], since it nowhere suggests how to apply its teachings to amino acid sequences without unique codons."

Id. at 1532. The Federal Circuit commented on the analogy which had been made to closely related homologies in chemistry, but rejected the notion that "the established relationship in the genetic code between a nucleic acid and the protein it encodes also makes a gene *prima facie* obvious over its correspondent protein." *Id.* It could only be said that knowing the protein structure "one can use the genetic code to hypothesize possible structures for the corresponding gene and that one thus has the potential for obtaining that gene", but that this does not render a sequence obvious, as due to the "degeneracy of the genetic code, there are a vast number of nucleotide sequences that might code for a specific protein." *Id.*

McKeon et al.

As stated by the Federal Circuit in *In re Bell*, Weissman "describes a general method for isolating a gene for which at least a short amino acid sequence of the encoded protein is known." *In re Bell* at 1530.

While the instant application was filed several years after the application in *In re Bell*, based on the fact situation the desaturase DNA is even less obvious than was the situation for the DNA in *In re Bell*. In *In re Bell* the primary reference provided the amino acid sequence for the protein, while McKeon *et al.* does not provide an amino acid sequence for the desaturase protein. In fact, while McKeon *et al.* claims to provide a method to obtain a highly purified desaturase protein, Applicants discovered that the protein obtained by this method was contaminated. (See, specification, page 24, lines 10-19; also Examples 2 and 3). Applicants submit herewith a copy of a declaration submitted in a related application, highlighting the problems encountered by Applicants in attempting the McKeon *et al.* method. This declaration includes contemporaneous pages from lab notebooks showing determinations made by Applicants of the contamination in the McKeon *et al.* preparation.

Two references from a Dutch research group are also enclosed (and cited on the attached IDS); Kater *et al.* (*Plant Molecular Biology* (1991) 17:895-909) and Stuitje *et al.* (Netherlands patent application NL 9002130). (Applicants note that the patent application names an additional co-inventor who is not listed as an author of the Kater *et al.* publication, but that otherwise the group is the same. See page 1, line 5 for inventors named in NL 9002130.) These publications provide evidence that a Dutch group isolated a plant enoyl-ACP reductase cDNA clone using antibodies from

what was believed to be a desaturase protein obtained from the McKeon et al. method.

In the paragraph spanning 900-901 of Kater et al., the authors discuss how the procedure failed to provide a purified desaturase in *B. napus* (rapeseed). Based on the McKeon et al. reference, the authors of Kater et al. suspected that the predominant protein, a 34kDa protein, was desaturase. Only after N-terminal sequencing were they able to show that this protein was not desaturase, but reductase. (First full paragraph, page 901).

The Stuitje et al. Dutch patent application, NL 9002130, demonstrates that the Dutch researchers had earlier formed a belief that the reductase cDNA they report in Kater et al. was a sequence encoding a plant desaturase. While no translation is available for this reference, and Applicants' representative is not proficient in Dutch, the technical references within the application are standard and understandable to a great degree from a careful scrutiny of the headings and figure legends. For example, Figure 1 of NL 9002130 provides a 1358 bp sequence described as "DNA-sequentie van desaturase". This sequence corresponds precisely to the 1358 bp reductase sequence of Figure 3 in Kater et al. Applicants representative has compared the entire sequences side by side and failed to uncover even a base difference. In both figures, nucleotide 44 begins with ATG, which is shown in the Kater et al. reference as initiating a reading frame which extends to nucleotide 1198.

In addition to the identity of the sequences, the cDNA's of these two references are also clearly obtained from the same source. In the paragraph spanning pages 12-13 of the Netherlands patent, a PCR reaction using DNA from *Brassica napus* is described. Page 15 contains a description of the isolation of RNA from *Brassica napus*, variety Rafel, and subsequent construction of a cDNA library. Claim 1 recites a cruciferous DNA for stearoyl-ACP -desaturase, while Claim 2 depends from Claim 1 and more specifically recites *Brassica* DNA. Claim 3 depends from Claims 1 or 2, and specifically recites DNA from *Brassica napus*. In Kater et al., the source of the cDNA is also *B. napus*. (See legend for Figure 3.)

As described in the declaration, and as is similar to the situation described above for the Dutch group, Applicants followed the protocol of McKeon et al., only with safflower, to a presumably purified desaturase protein preparation which was not purified, and then unwittingly used this preparation to clone a contaminant.

Kridl and Knauf

Kridl et al. teaches seed specific expression of an ACP gene during lipid development. Kridl does not teach or suggest a stearoyl-ACP desaturase, let alone a stearoyl-ACP desaturase-encoding DNA. Applicants note that in the broadest aspect the invention is not limited to the use of seed specific promoters.

Knauf contains speculation on the potential of antisense constructs for fatty acid synthesis genes. Knauf does not teach a method for accomplishing this, and does not disclose a desaturase encoding cDNA. Thus, Knauf only provides a motivation to try to express antisense fatty acid synthase pathway genes in plants. Knauf simply does not provide the missing desaturase encoding DNA.

Shewmaker et al.

As Applicants discussed above, the claims and the disclosure of the specification are not limited to antisense expression of plant desaturase, and Shewmaker et al. certainly does not provide the sequence to the desaturase DNA.

As this reference teaches the use of antisense constructs, Shewmaker et al. would appear to form a basis for rejection only of claims reciting a characteristic of antisense inhibition, such as Claim 35, 70 or 73. If Shewmaker et al. is intended to be applied as a grounds for rejection of the other claims which do not include the antisense limitation, then Applicants do not understand the basis for citing Shewmaker et al in this rejection.

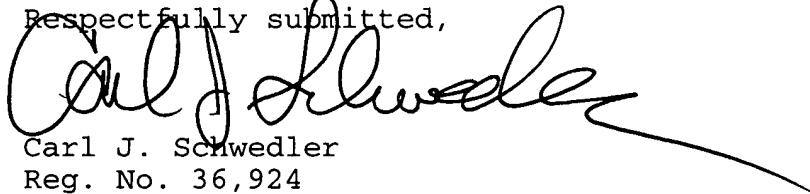
Viewing the references as a whole, they clearly do not teach or suggest Applicants' method of modification of plant fatty acids, as the desaturase DNA constructs recited in the claims are not found in the prior art.

In light of the foregoing, it is clear that the claims are free of the prior art, and Applicants respectfully request that the 35 U.S.C. § 103 rejection of the claims be withdrawn.

CONCLUSION

In view of the above, Applicants submit that the instant application is in immediate condition for allowance and early notice to this effect is solicited. If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the application, the Examiner is invited to contact the undersigned at (916) 753-6313.

Respectfully submitted,



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enclosure: *In re Bell*, 26 USPQ2d 1529 (Fed. Cir., 1993).
Substitute Declaration and Power of Attorney
Information Disclosure Statement
Copy of Declaration of Greg Thompson
Fig. 11